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ARCHAEOLOGICAL RESEARCH SERVICES, INC.
ASSOCIATES FOR CULTURAL RESOURCE STUDIES

# A PLAN TO TREAT EFFECTS TO HISTORIC PROPERTIES ASSOCIATED WITH THE ENVIRONMENTAL PROTECTION AGENCY'S CARSON RIVER MERCURY SITE: LOCATION MS 001 NORTH, DAYTON, NEVADA

Prepared for:

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E & E Project No. ZU1122

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# 1: INTRODUCTION

## 1.1 PROPOSED UNDERTAKING

The United States Environmental Protection Agency (EPA) is currently removing mercury contaminated soils and replacing these with non-contaminated soils in several areas in Dayton and Silver City, Lyon County, Nevada (Figure 1). The area of potential effects (APE) is limited to areas where mechanical excavation will take place. This undertaking is called the Carson River Mercury Site. All areas of potential ground disturbance proposed by the undertaking as designed in 1996 were inspected by Archaeological Research Services (ARS) staff (Reno 1996). Additional archaeological investigations, including recording of three archaeological sites and test excavations at two of these sites, were done by ARS (Reno and Clay 1996). As a result of this recording and testing, none of the sites were recommended eligible to the National Register of Historic Places (NRHP). This recommendation was concurred with by the Nevada State Historic Preservation Office (SHPO). However, due to the high archaeological sensitivity of the general area with its association with development of the Comstock Lode, archaeological monitoring was recommended by ARS in all areas of subsurface ground disturbance within the APE. In the course of this monitoring at location MS 001 North, three areas were found that contain deposits of nineteenth century artifacts and perhaps features that contain information potentially sufficient to warrant eligibility for the NRHP under Criterion D. The three areas of archaeological concern are shown on Figure 2 in relation to the APE. At this time there is no reason to suspect eligibility under other criteria but this could change should intact features be discovered during archaeological data recovery.

## 1.2 EFFECTS

Since the three archaeological locations were discovered during monitoring of earth removal by heavy equipment running at construction-required speeds, varying amounts of cultural fill (from 10-30 cm) was scraped away before the machinery could be halted. This clearly had an effect on these locations, which are parts of two properties. Site 959-1 is currently being recorded and two locations are at previously recorded Site 894-1. The site form for 894-1 is included as Appendix A.

The purpose of this treatment plan is to set out a means for mitigating the effects resulting from this undertaking to the extent that a determination of no adverse effect is justifiable. These means include enhanced archival research of the specific lots and relevant Dayton town history, expanded hand excavation to acquire a reasonable amount of archaeological information, an updated archaeological records search, artifact and feature analysis, and reporting incorporating information from all phases of work at MS 001.

## 1.3 SCHEDULING

Construction at MS 001 North cannot be completed until the proposed archaeological excavations are completed. We recommend completing these excavations as soon as permitted by the EPA in consultation with the SHPO and/or Advisory Council on Historic Preservation as appropriate. Additional historic research, analysis, and reporting will be initiated following completion of fieldwork related to the undertaking.

# 2: RESEARCH DOMAINS

## 2.1 HISTORIC PROPERTIES

### 2.1.1 SITE 894-1, KELLER & CO. MILL

This mill was built in 1861 as a water-powered stamp and arrastra plant to process ore from the Comstock Lode. By 1865 the mill was reconfigured with power by water and steam, and the arrastras were replaced by Wheeler Pans. The mill was dismantled by 1866. If the dismantling was incomplete, leaving in-place artifact deposits, room outlines, and foundations, a great deal of information could be derived from the mill archaeologically. Unfortunately, test excavations including backhoe trenches and hand-dug test pits showed that the mill area was massively disturbed after dismantling. Although many artifacts are present on site, they lack necessary contexts for meaningful interpretation. Due to this poor preservation, the mill was not regarded as significant.

Monitoring has revealed two locations where subsurface deposits of artifacts and perhaps features occur. Adjacent to the mill, but in a stratigraphically higher position, is a small, dense concentration of domestic household artifacts dating to about the 1880s (Feature 5). A 1x1 m test pit hand excavated in this concentration yielded almost as much artifactual debris as fill in the approximately 10 cm of fill remaining after mechanical scraping. This scraping removed about 10 cm of deposit before construction could be halted in this area. Most artifacts are glass bottles along with ceramics and bone.

The other location at 894-1 is Feature 6. This is a concentration of brick, assaying artifacts, and domestic glass and ceramics. This feature does not appear to be part of the 1860s mill. Artifacts near the top of the feature also appear to date to about the 1880s, but older materials may be present near the bottom of the feature. Currently, a profile cut by bulldozer along one side of the feature indicates that it is about 50 cm deep and may have coursed brick walls. Surface extent of the feature is suggested by a combination of machine blading and hand clearing during monitoring. Since time did not permit hand clearing of the brick portion of the feature, it is not yet known whether this is simply a secondary burned trash dump or is an assay office burned in place.

### 2.1.2 SITE 959-1, TRASH DUMP

A small trash dump was exposed during bulldozing near the north side of MS 001 North. Since it is adjacent to the Marsh driveway, it is only partly exposed and continues under the driveway. The portion of deposit available for study is about 3x3 m with about 10 cm of deposit remaining after blading. A 1x1 m test pit in this area indicated that this is a secondary dump deposited on a former surface rather than in a pit. Artifacts are from the 1880s-1890s. In addition to a broad range of domestic artifacts including buttons, bottles, and ceramics, this deposit has an extremely rich assemblage of butchered bone including cow and other smaller animals.

## 2.2 RELATION TO THE NEVADA STATE HISTORIC PRESERVATION PLAN

Hattori (1991) identifies three time periods likely to apply to materials recovered as part of this treatment plan:

| | |
|---|---|
| 1850-1863 | Comstock Bonanza |
| 1864-1872 | Comstock Fluctuations |
| 1873-1880 | Big Bonanza |

Among the sub-themes identified by Hattori, it is likely that Commerce and Industry / Mercantile Establishments (butcher shops); Land Usage / Townsite Development and City Planning (peripheral dumping patterns); and The People / Chinese will be applicable. Aside from its placer gold deposits, Dayton is important for its support facilities offered the lode areas of the Comstock. Hattori notes the importance of including such support areas in mining district studies. Dayton is an excellent illustration of the point made by Hattori that towns of this period are likely to have extensive buried resources.

Most research questions detailed below relate directly to a social/economic approach to a mining district study as recommended by Edaburn (1982:246), in particular status patterns, settlement/community patterns, ethnicity and ethnic relations, and social organization. In the assay area the focus of study will be industrial technology since the feature is not associated with a larger feature system allowing study of overall workplace organization.

## 2.3 RESEARCH QUESTIONS

The three trash deposits appear to relate to distinct households or businesses within Dayton. Even though they most likely cannot be tied to specific households in the documentary record, their characteristics can be used to approach research questions in consumer product availability and use. Examples of such dumps have not yet been formally documented in Dayton. This constitutes a data gap. Research questions to be addressed by all deposits include the following:

- How does consumer product availability here in Dayton compare to that at Virginia City at the time?
- How does consumer product availability here compare to that at other locations in the western United States?
- Is there a distinctive pattern to the commodities found in these trash deposits?
- Does the trash deposition appear to be secondary dumping from the main part of Dayton or from adjacent residences or businesses?
- Is there any indication of ethnic butchering patterns in the bone assemblage? (Chinese artifacts are common in the general area surrounding 959-1.)
- Is there a general economic distinction between these assemblages and those from comparable contexts elsewhere on the Comstock?
- Can any indication of the demographics of household composition (including age and gender) be inferred from the artifacts?
- How do these trash deposits relate to the overall stratigraphic environment of late nineteenth century Dayton?

In addition to the trash deposits there is the assay area (Feature 6) at Site 894-1. Additional questions may be posed about this industrial feature:

- Are there intact walls and floors related to this feature?
- Does this feature relate to the 1860s mill in any way?
- If not an intact feature, where are the materials likely to have come from?
- Is there anything distinctive about the assaying technology used?
- Does the feature and associated artifacts indicate that this is a complete assay area (including reagents) or is it only related to fire assay?

## 3: PROPOSED RESEARCH

Historical archaeological investigations cannot meaningfully be limited to the archaeological remains in the ground. A combination of sources will be used to determine as much meaning as possible from the remains in the APE and to provide a contribution to

historical, archaeological, and anthropological scholarship about mining communities on the American West. Background historical research including chain of title has already been collected by EPA or its contractors and by ARS. The current project will build on these materials.

## 3.1 ARCHAEOLOGICAL RESEARCH

At all three locations, ARS will conduct detailed archaeological research to obtain a reasonable sample of the remaining information. Since the locations are quite small and a proportion of each has already been eliminated by mechanical excavation, comparatively large percentages of the archaeological deposits are recommended for hand excavation. In all locations, the 1x1 m grid already in place for testing and evaluation procedures (done informally by monitors) will be expanded. Excavation will be stratigraphically by 1x1 m unit. All removed fill will be passed over 1/4 inch mesh screens.

If archaeological work slows down or stops construction, hand excavation in the construction zone will be speeded up by boxing screen oversize. The artifacts will be separated from waste materials later. Due to the large quantities of artifacts this procedure could double the speed of hand excavation.

All artifacts except small repetitive fragments will be saved for analysis. Collected materials will be decontaminated by personnel trained for handling hazardous materials before forwarding them to the lab for analysis. Since the artifacts belong to private landowners, they will not be marked or packaged for curation. Instead, artifacts that the landowner may wish to donate to a project display at the Dayton Museum will be separated from fragments. ARS will include a letter recommending such donation when the materials are returned to the landowner. Artifact analysis will be for minimum artifact counts per context, function, age, gender, economic scaling, ethnicity, taphonomy, and idiosyncracies. This project is yielding a large artifact collection that will make it an important case study.

All features encountered will be recorded and analyzed for date, function, and integrity. A key problem will be in attempting to discern whether intact architectural remains are within 894-1 Feature 6.

## 3.2 ARCHAEOLOGICAL BACKGROUND RESEARCH

Due to the length of time between onset of this project and present time, archaeological records at the Nevada State Museum will be rechecked to obtain information about historic projects completed within one mile of the APE since the time of the last record search.

## 3.3 ARCHIVAL RESEARCH

Supplemental archival research will focus on obtaining comparative information for Dayton and the rest of the Comstock. It is anticipated that most lot-specific information has already been collected. Local sources only will be consulted.

## 3.4 SPECIFIC ARCHAEOLOGICAL METHODS

### 3.4.1 SITE 894-1 FEATURE 5

Due to hand excavation of a test pit and surrounding mechanical exposures it is possible to discern closely the limits of this trash deposit to an area of about 2x3 m with a thickness of 10 cm or less resting on top of distinctive mill tailings. A 1x1 m test pit has removed a portion of this deposit. It is recommended that three additional 1x1 m surface scrapes be done here to remove most of the trash deposit. It is unlikely that more than 0.4 cubic meter of fill would be hand excavated from this feature.

### 3.4.2 SITE 894-1 FEATURE 6

Hand cleaning of mechanical scrapes and a bulldozer cut indicate that this trash deposit and possible assay area is no larger than 3x10 m. Since it is not yet known if there are intact architectural remains in this area (although suspected due to presence of large amounts of brick and mortar), two options are recommended. We recommend six 1x1 m hand dug units for this area spread out so as to sample the variety of artifacts and provide a test of the integrity of the suspected architectural remains. If intact architectural remains are found here, then we recommend excavating a supplemental six 1x1 m units to open up large enough areas to properly document the architecture and to discern spatial relationships of artifacts in the context of features. Excavation will be stratigraphic, initially starting from the 50 cm high bulldozer cut running the length of one side of the feature. Based on an estimated depth of 50 cm below present ground surface, 3 cubic meters would be hand dug if no intact architecture is found and up to an additional 3 cubic meters would be hand excavated if intact architecture is uncovered. Thus, the total amount of hand excavation at this feature is projected at from 3-6 cubic meters.

### 3.4.3 SITE 959-1

Hand excavation of a 1x1 test pit in the middle of this feature has confirmed that the remaining portion in the APE is relatively thin (under 10 cm) and lies on a surface of overbank river deposits rather than being within a pit feature as originally suspected. The area of dense debris within the APE is only about 2x3 m. With the extremely high artifact and bone densities encountered in the test pit, another three 1x1 m scrape units should provide an excellent assemblage. This would result in about 0.4 cubic meters of hand excavation.

## 4: PERSONNEL

All project personnel will meet or exceed the standards specified for their tasks in the Secretary of the Interior's Professional Qualifications Standards. In addition, all field personnel will have completed a course in hazardous waste site operations for general site workers and required updates as specified in 29 CFR 1910.120. Ronald L. Reno, Ph.D. will serve as Principal Investigator, Field Supervisor, and Historical Archaeologist. The archaeology of nineteenth and early twentieth century mining-related sites is his specialty. He will also be responsible for most historical research and report preparation. Vickie L. Clay, M.A. is the project geoarchaeologist and field crew chief. Ms. Clay has extensive experience in the convoluted stratigraphy of historic sites. Thomas Burke, Ph.D. is the project manager and also serves as a field crew chief. Artifact analysis will be by C. Lynn Furnis, B.A. Faunal analysis will be subcontracted to a specialist on historic bone materials. Sheri Gust, M.A. is currently working with ARS in this capacity and it is hoped that she will be willing to undertake this project. In addition, up to three field technicians will be employed.

## 5: REPORTING

A letter report will be sent to the EPA upon conclusion of fieldwork in MS 001 North. In addition, a comprehensive report detailing results of monitoring, evaluation, and data recovery at all portions of the Mercury Project APE will be prepared upon completion of fieldwork and analysis. This technical report will meet or exceed the Secretary of the Interior's Standards and Guidelines for reporting.

## REFERENCES

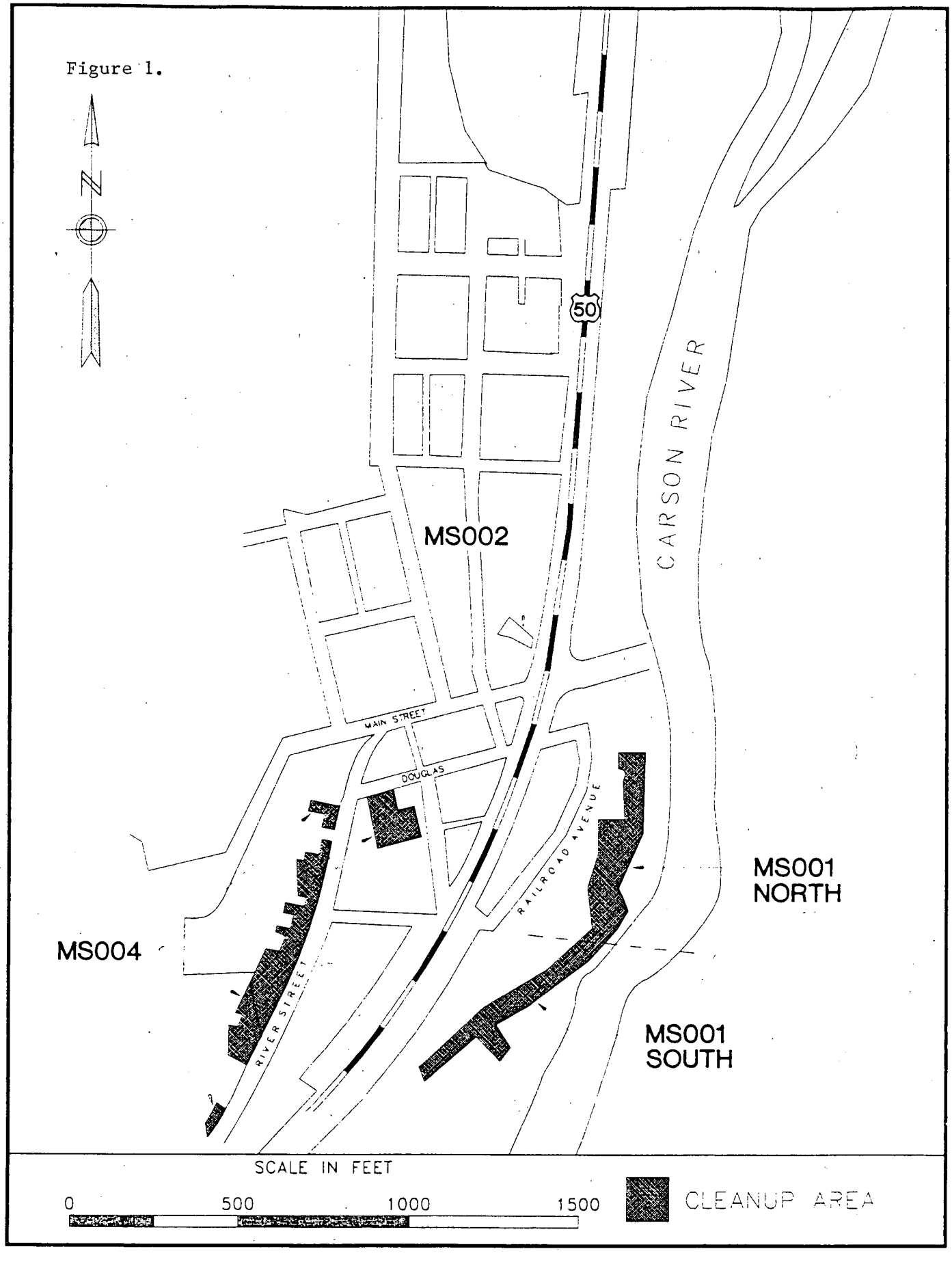
Edaburn, S.
1982 Mining and Industry Activities. In *An Archaeological Element for the Nevada Historic Preservation Plan,* edited by M. M. Lyneis. Nevada Division of Historic Preservation and Archaeology. Carson City, Nevada.

Hattori, E. M.
1991 Mining and Mining-Related—The Comstock Era. In *Nevada Comprehensive Preservation Plan*, Second Edition, edited by W. G. White, R. M. James, and R. Bernstein. Division of Historic Preservation & Archeology, Carson City, Nevada.

Reno, R. L.
1996 *Memorandum* to Mary Ann Wright, Ecology and Environment, Inc., regarding Carson River Mercury Site, Archaeological Inventory Services.

Reno, R. L. and V. L. Clay
1996 *Archaeological Evaluation of the Carson River Mercury Site at Dayton and Silver City, Nevada.* Archaeological Research Services, Inc., Virginia City, Nevada. Report submitted to Ecology and Environment, Inc., Seattle, Washington.

Figure 1.




# DAYTON
# PROJECT LOCATION MAP

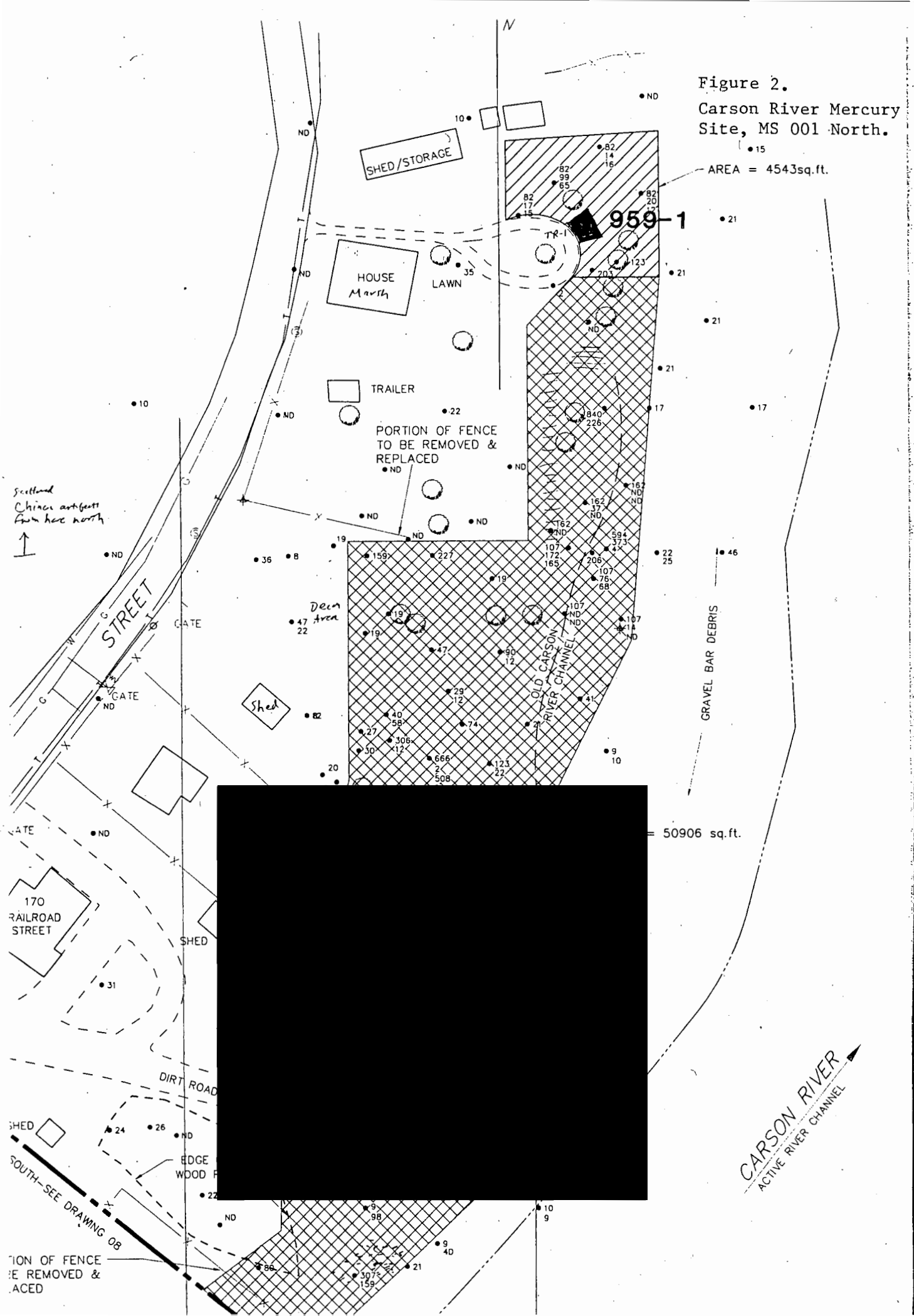
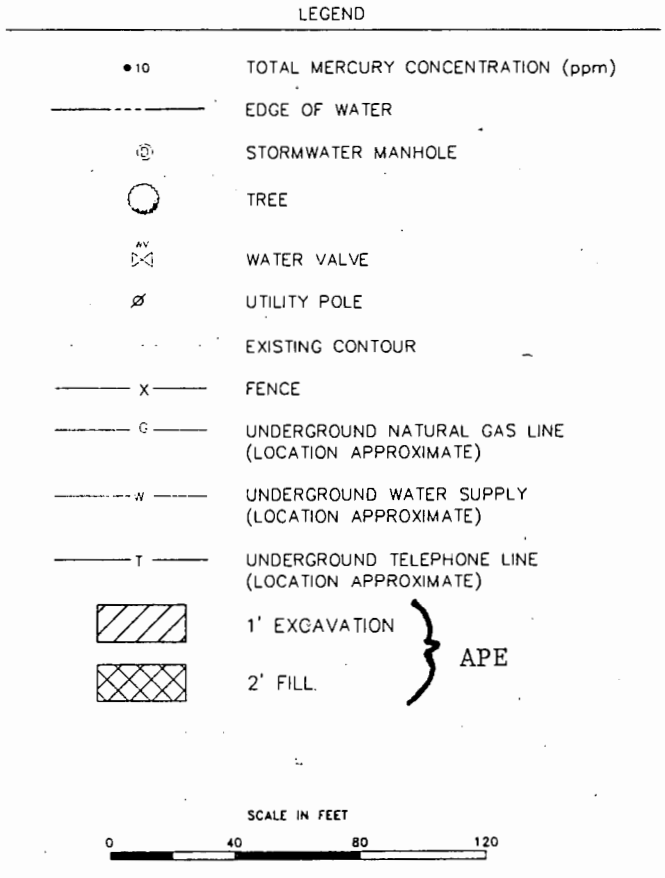



Figure 2.
Carson River Mercury Site, MS 001 North.

Figure 2 Legend.




nment, inc.

# CARSON RIVER MERCURY SITE

## CLEANUP AREAS MS001 NORTH

| SCALE | DATE ISSUED | C.A.D. FILE NO. | DRAWING NO. | REV. |
|---|---|---|---|---|
| 1"=40' | 2/10/97 | ZU1S117D | ZU1070 – 07 | |

# APPENDIX A
# SITE FORM 894-1

IMACS SITE FORM

## PART A - ADMINISTRATIVE DATA

**Intermountain Antiquities Computer System**

***1. State No:**
***2. Agency No:**
**3. Temp. No:** 894-1

4. **State:** Nevada **County:** Lyon
5. **Project:** Carson River Mercury Project (ARS #894)
* 6. **Report No:**
7. **Site Name:** Keller & Co. Mill, also known as Lindauer & Hirschman Mill, and as the Sweetapple Mill.
8. **Class:** Historic
9. **Site Type:** Metallurgical Mill.
* 10. **Elevation:** 4360 ft
* 11. **UTM Grid Zone:** 11 276620 m E 4345750 m N
* 12. SE¼ of NW¼ of SE¼ **of Section** 23 **T.**16N, **R.**21E
* 13. **Meridian:** Mt. Diablo
* 14. **Map Reference:** USGS Dayton Nev. 7.5', 1987; Piedmont Engineering 1"=40'
15. **Aerial Photo:**
16. **Location and Access:** The site is primarily in the backyard of the residence at FX-6 Personal in Dayton. The souther portion of the site is accessible from FX-6 Personal a private driveway at the south end of Dayton, about 0.1 mile south of where FX-6 Personal intersects US 50.
* 17. **Land Owner:** Private FX-6 Personal Privacy
* 18. **Fed. Admin. Units:**
* 19. **Location of Curated Materials:** No collections were made.
20. **Site Description:** Two mills for the processing of ore from the Comstock occupied the site. The original mill was built in 1861 by Joseph Keller and Isaac Cohen. This mill was reported to be 60 x 75 ft, with five stamps and four arrastras, run by a water wheel. The mill was transferred to Abram Lindauer and Moses Hirschman in 1862. At some point the mill was extensively reconfigured to a Washoe pan mill. Henry Sweetapple obtained a share by 1864. By 1865 the mill was powered by a combination of steam and water, had 15 stamps, and ten Wheeler pans. The mill was dismantled by the end of 1866. Physical remains of the mill are confined to remnants of this dismantling in a distinct mound in the center of the site (Feature 1). Backhoe trenches in this mound and hand excavation units confirm the presence of artifacts diagnostic of both milling episodes within the mound, but these items are not in intact deposits. There is also evidence of extreme burning, suggesting that following removal of salvageable materials the remaining structure was burned. The 1862 plat of the mill included with this form shows the mill building may have been to the northeast of the mound, in an area presently partly in the Carson River and partly on a low area frequently swept by high water. Water has played an active role on this site. In 1862 the mill reservoir covered the entire part of the site south of the mound. The dam for this reservoir extended from about where the mound now stands across the present river channel. A portion of this dam may be represented by a rock alignment recorded as Feature 2. By 1885 the dam had been swept away and the main river channel flowed over the entire site. In addition to these human-made channel alterations, the site has periodically been swept by floods.

    In addition to the mill remains there is an artifact scatter including 19th and 20th century domestic and architectural items. This scatter extends over the surface of the site and is preserved in the depression of the Rock Point Ditch (recorded as Site 894-2) that extended through the site in the first half of the 20th century. Artifacts preserved in the ditch berm are exposed as Feature 4. Testing has shown this debris to be highly fragmented and moved about where preserved in depressions. Most of the flat terrace surfaces have most soil either bladed or washed away. Hence, artifact concentrations observable on the surface, such as Feature 3, have no depth.

IMACS SITE FORM

## PART A - ADMINISTRATIVE DATA

**Intermountain Antiquities Computer System**

***1. State No:**
***2. Agency No:**
**3. Temp. No:** 894-1

* **21. Site Condition (A-excellent, B-good, C-fair, D-poor):** Poor

* **22. Impact Agents:** Erosion (flooding); Dismantling; burned down; redeposition due to blading.

* **23. Nat. Register Status (C-significant, D-non-significant, Z-unevaluated):** Non-significant.
**Justify:** A Washoe pan mill would be significant under criteria A, C, and D if it had any intact features that would contribute to our understanding of the development of the Washoe milling process. Although the original mill owners were locally significant, their significance was primarily in relation to their store business, not their milling interests so it is not appropriate to consider their mill potentially significant under Criterion B. Due to the dismal state of preservation of the mill, it lacks sufficient integrity to be significant under any criterion.

**24. Photos:** Roll ARCP 431 fr. 3; ARCP 458 fr. 2, 5, 6; VC1 fr. 9, 20, 29, 33, 37.

**25. Recorded by:** R. Reno

* **26. Survey Organization:** Archaeological Research Services, Inc. (AR), P.O. Box 701, Virginia City, Nevada 89440

**27. Assisting Crew Members:** V. Clay, L. Hause, T. Burke

* **28. Survey Date:** 11/4 to 15/1996

**List of Attachments:**

| | |
|---|---|
| Part B | ✔Topo Map |
| ✔Part C | ✔Site Sketch |
| ✔Encoding Sheet | Artifact/Feature Sketch |
| ✔Photos | ✔Other (Historic Map) |

## PART A - ENVIRONMENTAL DATA

**Site No:**
**Agency No:**
**Temp. No:** 894-1

* **29. Slope:** 0-4 **(degrees)** **Aspect** 100 **(degrees)**

* **30. Distance to Permanent Water:** 0 X 100 meters
**Type of Water Source (A-spring/seep, B-stream/river, C-lake, D-other):** River
**Name of Water Source:** Carson River

* **31. Geographic Unit:** Dayton Valley (BND)

* **32. Topographic Location:**
**Primary Landform:** Valley (E) **Secondary Landform:** Floodplain (J)
**Describe:**The site is on floodplain adjacent to the west bank of the Carson River. Microtopography includes a small mound at the center of the site.

* **33. On-site Depositional Context:** Stream terrace (D)
**Description of Soil:** Gravelly sandy loam. Archer (*Soil Survey of Lyon County Area, Nevada* 1984) mapped the west half of the site as Veta very gravelly sandy loam (map unit 701) and the east half of the site as Fallon fine sandy loam, frequently flooded (map unit 293). Although the floodplain is generally a depositional context, the site itself is in an erosional area subject to removal of materials by overbank flooding of the Carson River in a high energy location at a small curve in the river. Presently the bank is riprapped to reduce erosion and it seems that this practice may have been extant in the past in the mound area to protect the mill from water erosion.

* **34. a. Life Zone: Upper Sonoran**
**b. Community:** **Primary On-Site:** Tall Sagebrush (P)
**Secondary On-Site:** Developed/Agriculture (U)
**Surrounding Site:** Riparian (L)

**Describe:** Recently undisturbed areas have a cottonwood and big sagebrush overstory. Most of the site has been recently bladed. These developed areas are covered by dense Russian thistle, goathead, mustard, and grasses.

* **35. Miscellaneous Text:**

**36. Comments/Continuations/Location of Curated Materials and Records:**

## PART C - HISTORIC SITES

**Site No:**
**Agency No:**
**Temp. No:** 894-1

1. **Site Type:** Metallurgical Mill/Domestic Debris Scatter
* 2. **Historic Theme(s):** Mining/Milling
* 3. **Culture:**
**Affiliation:** Euro-American (EA) **Dating:** Documents/Artifacts (I/F)
* 4. **Oldest Date:** 1861 **Recent Date:** 1866
**How Determined?:** Documents supported by artifact content. Date is for end of milling phase. Artifacts continued to accumulate to present.
* 5. **Site Dimensions:** 230 m x 50 m ***Area:** 9032 sq m
* 6. **Surface Collection/Method: (A-None, B-Grab sample, C-Designed sample, D-Complete collection):**
**Sampling Method:** None
* 7. **Estimated depth of fill: (A-surface, B-0-20 cm, C-20-100 cm, D-100 cm +, E-fill noted but unknown), F-Depth suspected but not tested):** 100 cm +
**How Estimated (if tested, show location on site map):** Backhoe trenches and hand excavation units.
* 8. **Excavation Status: (A-Excavated, B-Tested, C-Unexcavated):** Tested.
**Testing Method:** The mound area (Feature 1) was tested with two backhoe trenches (TR1 and TR2) and two 1x1 m hand excavation units (EU2 and EU3). A rock feature near the probable location of the historic diversion dam was tested by hand excavation unit EU1). The surface artifact scatter (Feature 3) was tested by a backhoe trench (TR3) primarily oriented to test the Rock Point Ditch (Site 894-2). Redeposited artifacts visible in a recent cut made in the berm of the Rock Point Ditch were tested with trench TR4, that also had as it's primary goal testing of the Rock Point Ditch. The artifact scatter in the south portion of the site was tested by means of three hand excavation units, EU4 to EU6.
* 9. **Summary of Artifacts and Debris:** Glass, metal, cut and wire nails, bone, ceramics, fabric, leather, wire, cans, wood, rubber, domestic items, car/car parts, etc.
**Describe:**Mill-related artifacts were all found subsurface in the mound (Feature 1). The stratigraphic situation is described by Reno and Clay (1996). Artifacts diagnostic of the first phase of milling are two large arrastra stones. These stones were part of pavement of one or two of the arrastras. Based on curved striations on the upper surfaces the arrastras were at least 8 ½ ft in diameter. A distinctive boss from a Washoe pan muller shoe confirms presence of a pan mill, although the part is to fragmentary to confirm that it came from a flat-bottomed Wheeler Pan as indicated by documents. Other mill-related items were in a jumble. Most of the mound includes architectural materials (rock, brick, cut spikes, large timber fragments) in total disarray. In the matrix is also remains of lighting fixtures (lamp chimneys) and small numbers of domestic items such as bottles and IWE. Most wood artifacts were unidentifiable, but one barrel was preserved. Carboy fragments and remnants of copper plates occur in several locations in the mound. A lens of intensely burned materials includes many cut nails and molten glass fragments.

Feature 3 is an artifact concentration in a bladed area. These highly fragmented artifacts include cut nails, glass, and ceramics. One mule shoe was found on the surface in this area and another was found subsurface. Where observed on the surface, testing showed this deposit to be surficial, however in depressions it has been redeposited and preserved subsurface. None of these artifacts appear to be in their original place of deposition.

Feature 4 is an artifact concentration exposed in the berm of the Rock Point Ditch by a recent borrow pit. In addition to glass and ceramics there are leather and cut bone fragments.

Similar artifact classes are exposed on the surface in the southern half of the site, including glass, ceramics, bone, and brick fragments.

## PART C - HISTORIC SITES

**Site No:**
**Agency No:**
**Temp. No:** 894-1

*** 10. Ceramic Artifacts:**

| Paste | Glaze/Slip | Decoration | Pattern | Vessel Forms | No. (all frags) |
|---|---|---|---|---|---|
| IWE | | | | Serving plate | >50 |
| IWE | | | | Dinnerware | >1000 |
| White earthenware | | Undecorated, floral transfer | | Serving platter, Dinnerware | 3 |
| Gray ironstone/clear | | | | Crock | 1 |
| " | /brown | | | Bottle | 1 |
| Porcelain | | | | | 1 |
| Yellowware | | Molded | Floral | | 3 |
| Red earthenware | | Molded | Ribbed | | 1 (in many frags) |
| " " | /Brown lead | | | Sewer pipe | 20 |

***a. Estimated No. of Ceramic Trademarks:**
**Describe:** None observed

*** 11. Glass:**

| Quantity | Manufacture | Color | Function | Trademarks | Decoration |
|---|---|---|---|---|---|
| 1 | | aqua | bottle side, octagonal | | |
| 3 | mouth-blown molded | dark green | bottle, wine | | |
| 1 | mouth-blown | aqua | oil finish | | |
| 1 | mouth-blown molded | purple | liquor, picnic flask | | |
| 1 | mouth-blown | brown | "blob" finish | | |
| 11 | | aqua | window | | |
| 1 | pressed | cobalt blue | | | embossed |
| 1 | mouth-blown molded | purple | prescription finish | | |

**Describe:** Also fragments including >500 aqua, 6 cobalt, >50 brown, >50 green, >10 purple, 1 white.

**12. Maximum Density-#/sq m (glass and ceramics):** 20

*** 13. Tin Cans:**

| Type | Opening | Size | Modified | Label/Mark | Function |
|---|---|---|---|---|---|

**Describe:** Due to extremely poor preservation, only unidentifiable rust fragments were found.

*** 14. Landscape and Constructed Features (locate on site map):** Mill tailings (ML), Rock alignment (RA)
**Describe:** Mill tailings, probably from the nearby Birdsall Mill, were found subsurface in Trench TR4 in what seems to be a buried tailings pond. Other traces of mill tailings occur throughout the site subsurface. A rock alignment (Feature 2) may be remains of the mill dam, or may simply be remains of some riprap to control the Carson River.

## PART C - HISTORIC SITES

Site No:
Agency No:
Temp. No: 894-1

**15. Buildings and Structures (locate on site map):**

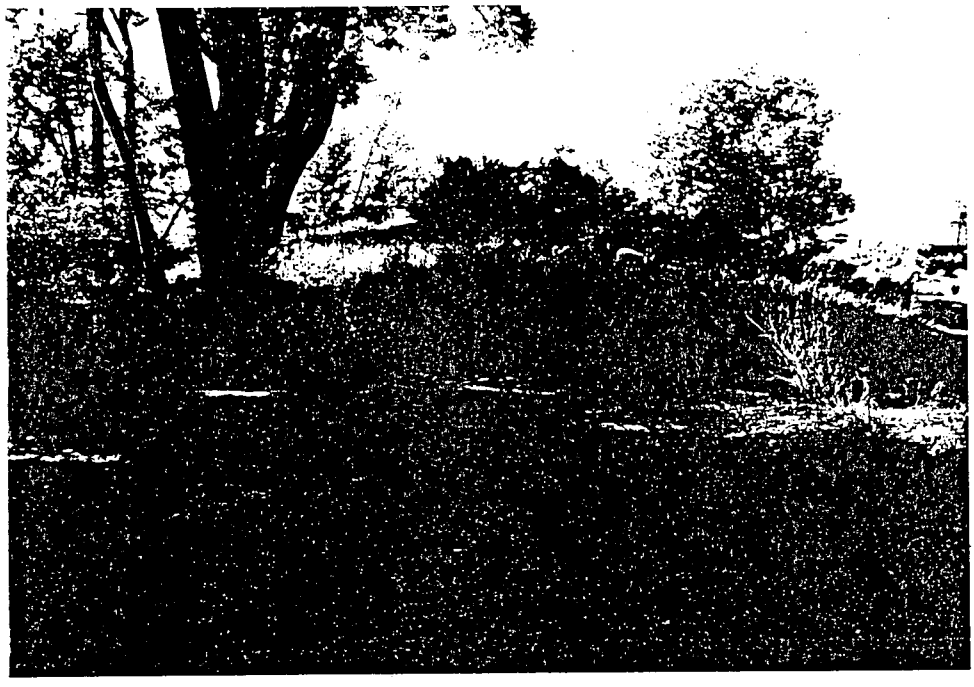
| # | Material | Type | # | Material | Type |
|---|---|---|---|---|---|

**Describe:** Although no foundations were found, the mound contains displaced structural members of the mill. If the mill was not actually located on the basal layer of the mound (composed of river terrace materials), it must have been located nearby.

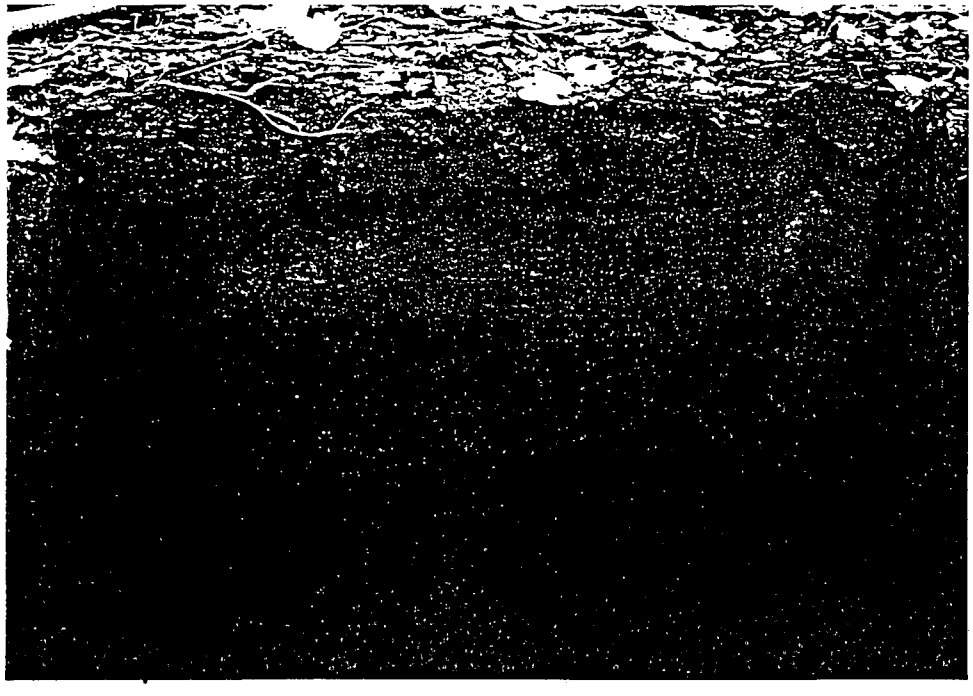
**16. Comments/Continuations: (Please make note of any Historic Record searches performed (for example - County Records, General Land Office, Historical Society, Land Management Agency Records, Oral Histories/Interviews)** Records search at Nevada State Museum, Lyon County Courthouse, Nevada State Library, Nevada Historical Society, ARS files, Dayton Library.

Additional data, including excavation profiles and a detailed catalog of materials from the test excavations, are in Reno and Clay (*Archaeological Evaluation of the Carson River Mercury Site at Dayton and Silver City, Nevada.* ARS Project 894).

ARS Project No. 894, Site 894-1,
Carson River Mercury Project, Lyon County, Nevada

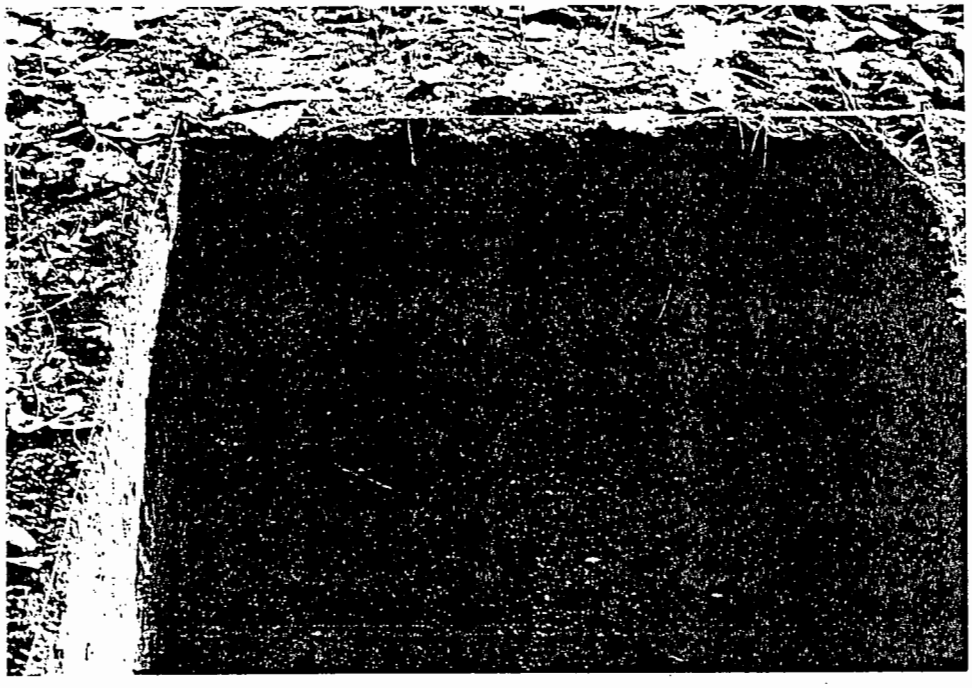


Roll ARCP 431, fr. 3, 11-4-96: Mound overview, Feature 1, 220°.

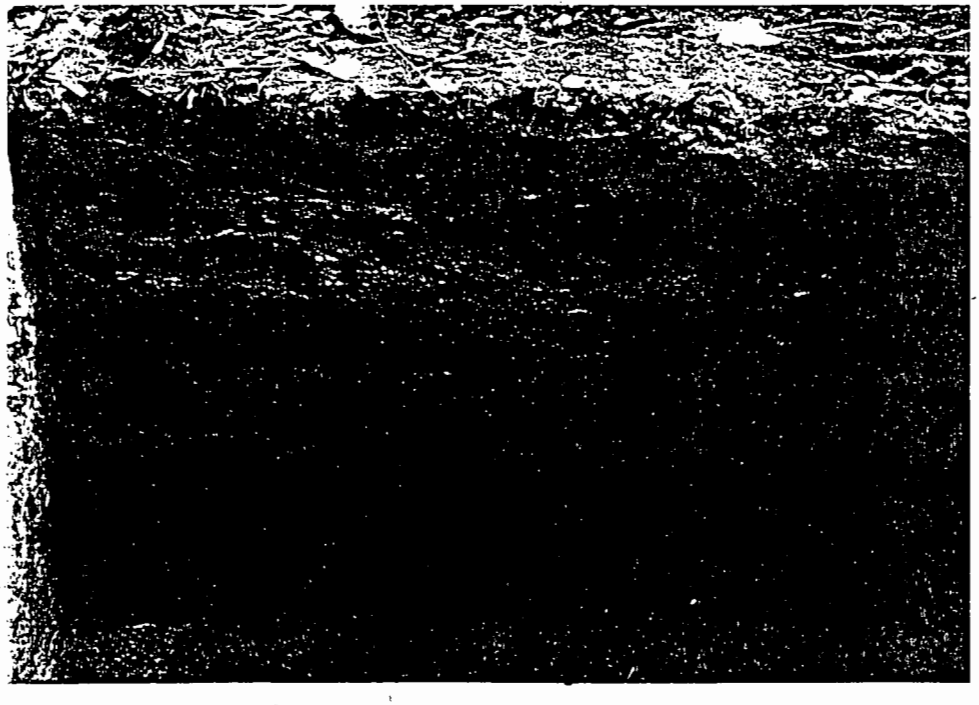


Roll ARCP 458, fr. 6, 11-15-96: EU6 final, north.

**ARS Project No. 894, Site 894-1,**
**Carson River Mercury Project, Lyon County, Nevada**



Roll ARCP 458, fr. 2, 11-14-96: EU5 final, 0-40 cm bs, south.

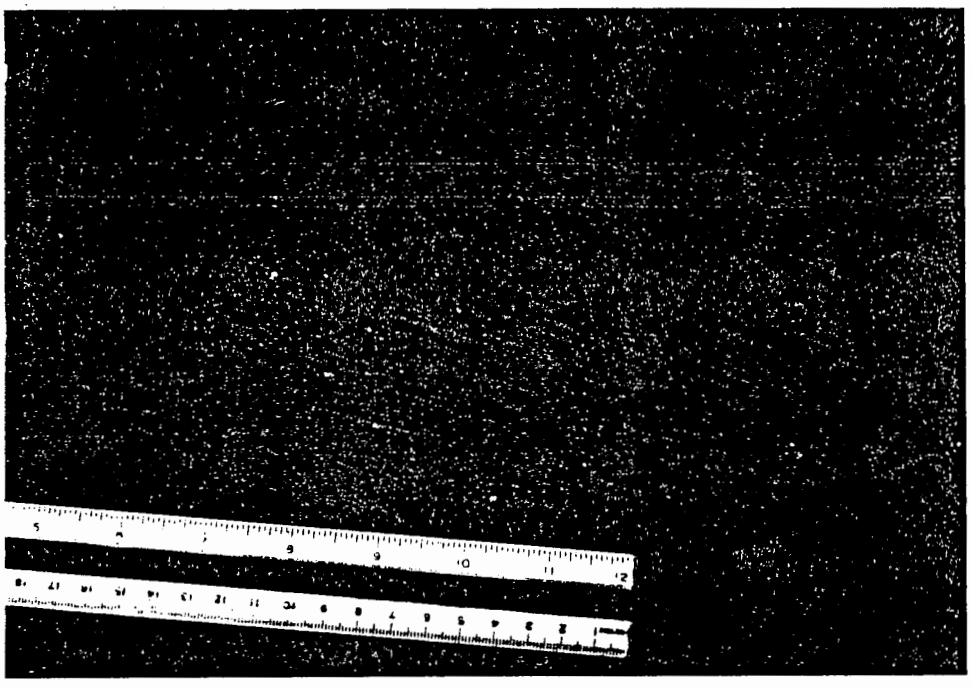


Roll ARCP 458, fr. 5, 11-15-96: EU6 final, east.

**ARS Project No. 894, Site 894-1,**
**Carson River Mercury Project, Lyon County, Nevada**

Roll VC1, fr. 9, 11-8-96: Trench 1 overview, Feature 1-1 in foreground, north.

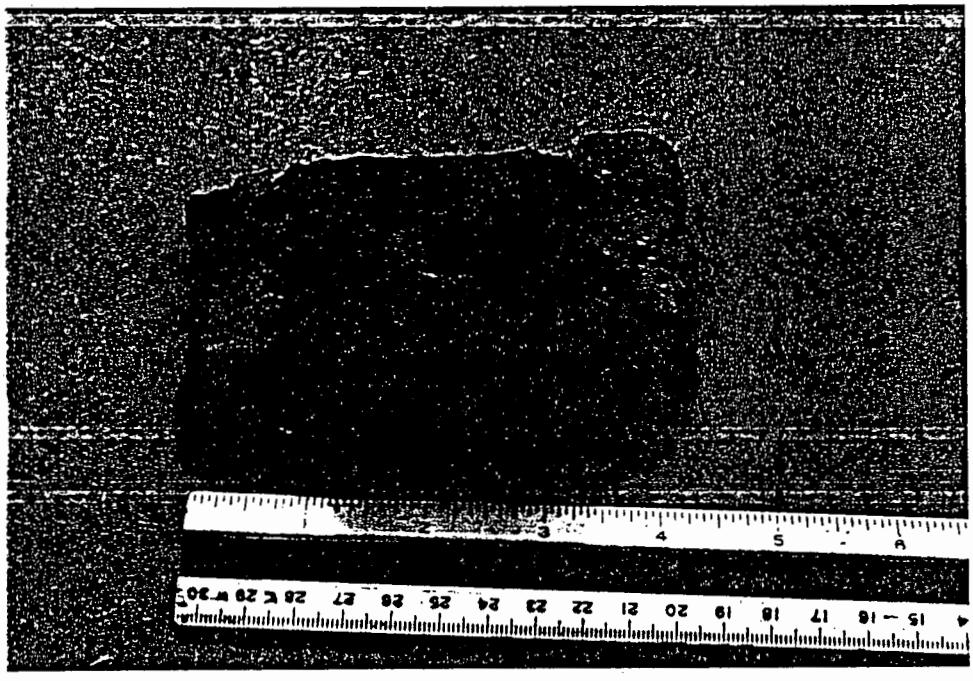
Roll VC1, fr. 20, 11-8-96: EU2, Stratum 5, Feature 1-2, with beams, north.



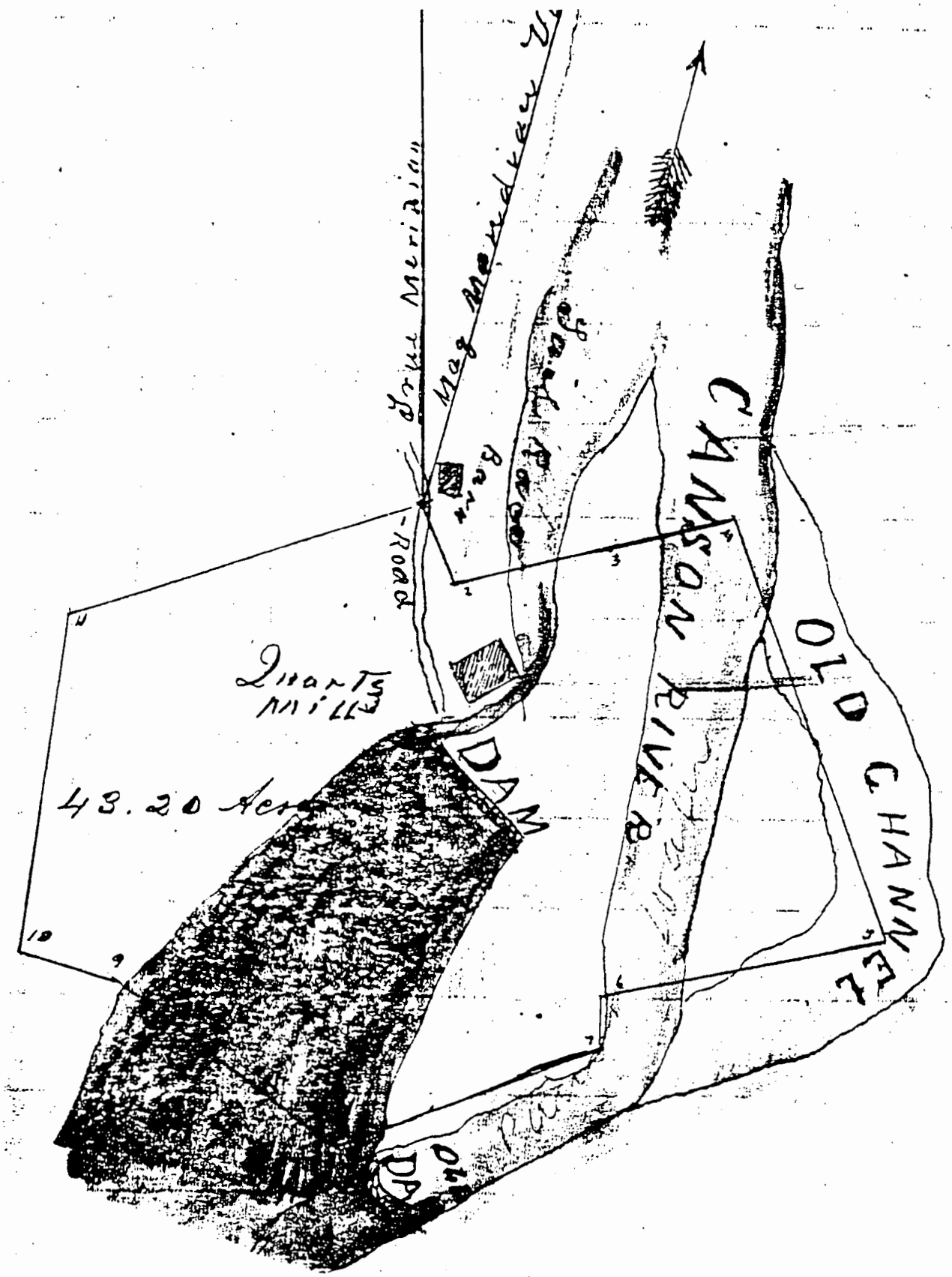
Roll VC1, fr. 29, 11-8-96: Feature 2: Arrastra stone, close-up of grooves.

Roll VC1, fr. 33, 11-12-96: EU3, Feature 1-1, north wall final photo, north.

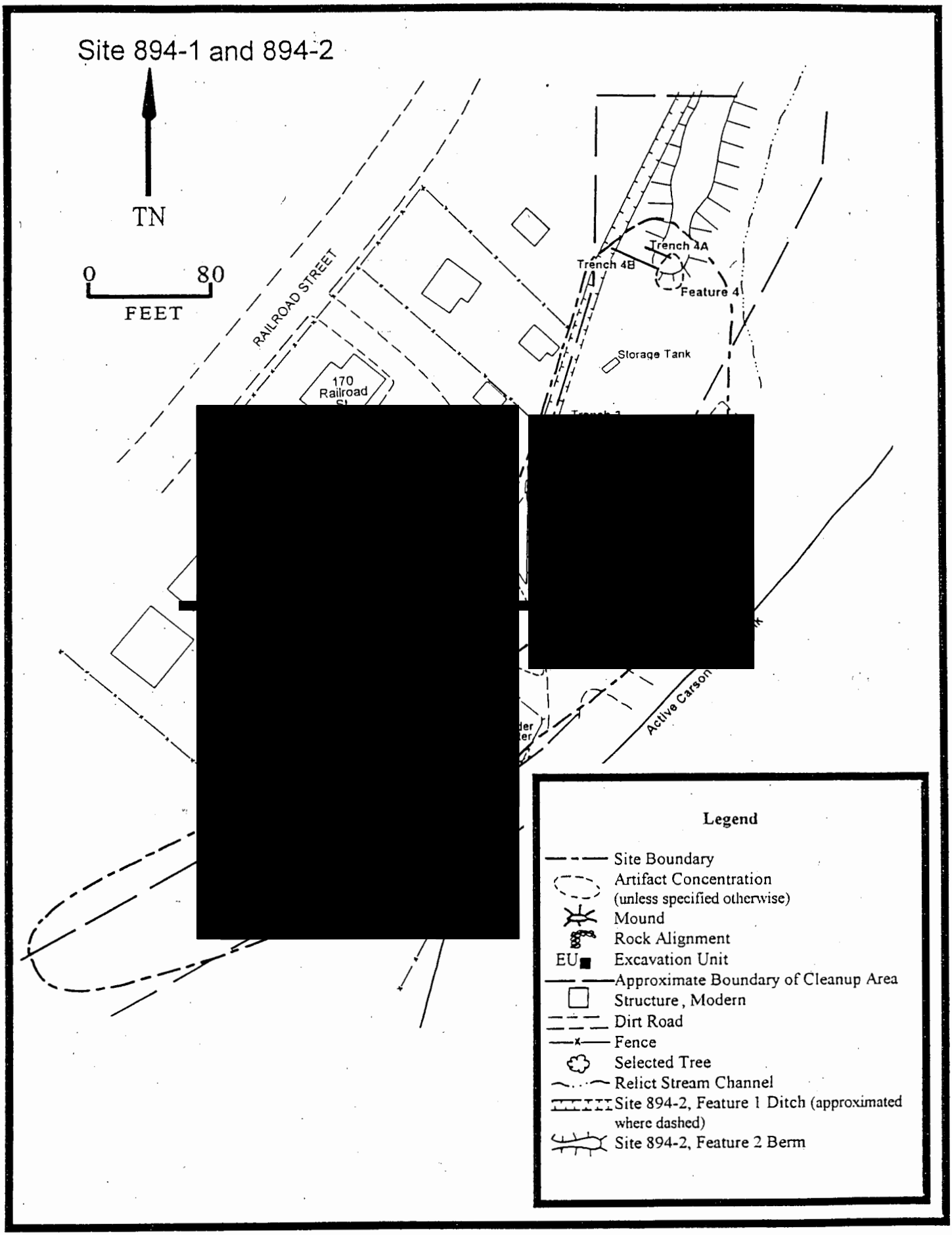
**ARS Project No. 894, Site 894-1,**
**Carson River Mercury Project, Lyon County, Nevada**



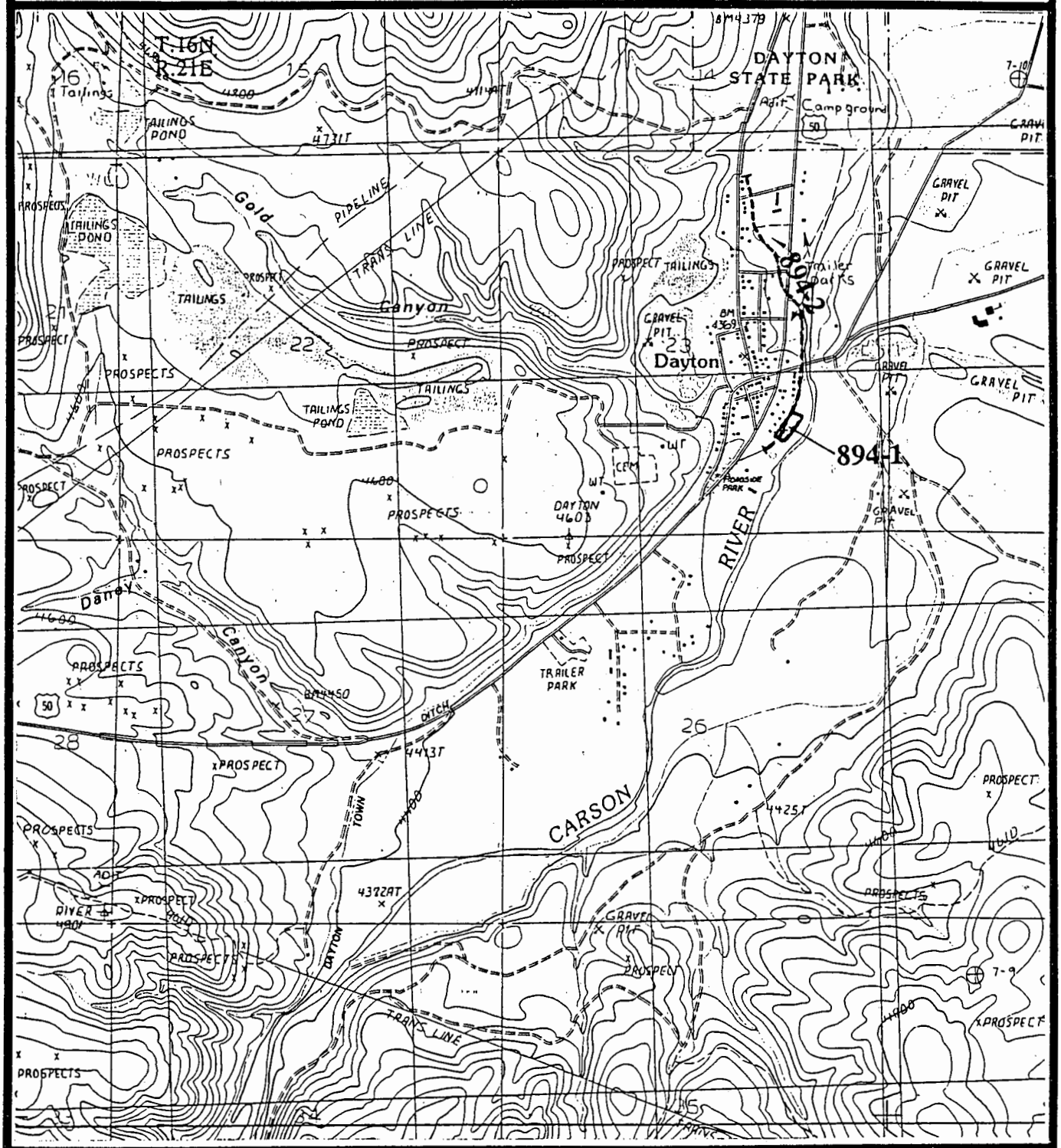
Roll VC1, fr. 37, 11-14-96: Washoe pan shoe from EU2, Stratum 13.




**Site 894-1** Keller and Company millsite surveyed on Nov. 20, 1862 for Lindauer, Hirschman, and Sweetapple (Surveys A:209). Plat has been enlarged.


Site 894-1 and 894-2
TN
0
80
FEET
RAILROAD STREET
170
Railroad
Trench 4A
Trench 4B
Feature 4
Storage Tank
Active Carson
Legend
Site Boundary
Artifact Concentration
(unless specified otherwise)
Mound
Rock Alignment
EU
Excavation Unit
Approximate Boundary of Cleanup Area
Structure, Modern
Dirt Road
Fence
Selected Tree
Relict Stream Channel
Site 894-2, Feature 1 Ditch (approximated
where dashed)
Site 894-2, Feature 2 Berm

# Site Location Map




.0 ..5 1.0 Miles

.0 .5 1.0 Kilometers

*Archaeological Research Services, Inc.*

Project No: ARS 894
County: Lyon
Map: Dayton, Nev. Prov. Ed. 1987
Scale: 1:24,000

N

1990

# IMACS ENCODING FORM

To be completed for each site form.
For instructions and codes, see IMACS Users Guide.

Encoder's Name: D. Mathews
894-1

## A

1 State Site Number: [ ] - [ ] - [ ]

2 Agency Site Number: [ ] - [ ]

6 Agency Report Number: [ ]

10 Elevation: 4360

11 Zone: 11 Easting: 276620 Northing: 4345750

12 1/4: SE 1/4: NW 1/4: SE Sec.: 23 T.: 16 N R.: 021 E

13 Mold.: 7

14 USGS Map: DAYTON NEV. 7.5' 1987

17 Owner: PR

18 Forest: [ ] Dist./Park: [ ]

19 Loc. Curated Materials: [ ]

21 Cond.: D

22 Impacts: ER DM DT

23 NRI: D

26 Organ.: AR

28 Survey Date: 11-04-96

29 Slope: 04 Aspect: 180

30 Water: distance/type: 0401 B

31 Geog. Unit: BMD

32 Topographic Location: 1st E 2nd J

33 Dep.: D

34 Vegetation: 1 E 2 P 3 UL

35 Misc. Text, Site Name: KELLER #1 CO MILL

## B

2 Culture/Dating Method: [ ] [ ]

3 Area: [ ]

4 Collect: [ ]

5 Depth: [ ]

6 Excav. Status: [ ]

7 Prehistoric Artifacts: [ ]

8 Lithic Tools: # / type: [ ] [ ]

9 # Flaking Stages: [ ]

11 Ceramics: # / type: [ ]

13 Features: # / type: [ ]

14 Architecture: # / material / type: [ ]

## C

2 Historic Themes: MN [ ]

3 Cultures / Dating Method: EAI EAF

4 Dates: 1861 1866

5 Area: 0.9032

6 Collect.: A

7 Depth: D

8 Excav. Status: E

9 Artifacts: GL ME NC NW CS LE WI WD CR

14 Features: # / type: ML 1 RA [ ]

15 Architecture: # / material / type: [ ]